## **WEST Search History**

DATE: Tuesday, September 30, 2003

| Set Name side by side  | Query                             | Hit Count | Set Name result set |
|--|-----------------------------------|-----------|---------------------|
| DB= $USPT$ , $PGPB$ , $JPAB$ , $EPAB$ , $DWPI$ , $TDBD$ ; $PLUR$ = $YES$ ; $OP$ = $OR$ |                                   |           |                     |
| L2   | L1 same periphery                 | 24        | L2                  |
| L1   | (silicon near2 crystal) same osf! | 191       | L1                  |

END OF SEARCH HISTORY

## WEST

Generate Collection Print

L2: Entry 23 of 24

File: DWPI

Jul 27, 1999

DERWENT-ACC-NO: 1999-473951

DERWENT-WEEK: 199940

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TITLE: Crystal growth for manufacturing quality wafer - involves drawing at a velocity so oxidation induced stacking fault ring is generated inwardly from crystal periphery or may quench in the crystal centre part

PATENT-ASSIGNEE:

ASSIGNEE

CODE

SUMITOMO METAL IND LTD

SUMO

PRIORITY-DATA: 1997JP-0367703 (December 26, 1997)

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 11199385 A

July 27, 1999

005

C30B029/06

APPLICATION-DATA:

PUB-NO

APPL-DATE

APPL-NO

DESCRIPTOR

JP 11199385A

December 26, 1997

1997JP-0367703

INT-CL (IPC): C30 B 15/00; C30 B 29/06

ABSTRACTED-PUB-NO: JP 11199385A

BASIC-ABSTRACT:

NOVELTY - Quenching near the solid-liquid boundary surface of the single crystal (11) is carried out during the growth of silicon single crystal by Czochralski process. The drawing velocity of the single crystal is such that the  $\overline{\text{OSF}}$  (oxidation induced stacking fault) ring is generated inwardly from crystal  $\overline{\text{periphery}}$  or it may quench in the crystal centre part.

USE - For manufacturing quality wafer.

ADVANTAGE - Yield of production is high and generation of porosity cluster is suppressed.

DESCRIPTION OF DRAWING(S) - The figure shows drawing of single crystal. (11) Single crystal.

CHOSEN-DRAWING: Dwg.1/1

TITLE-TERMS: CRYSTAL GROWTH MANUFACTURE QUALITY WAFER DRAW VELOCITY SO OXIDATION INDUCE STACK FAULT RING GENERATE INWARD CRYSTAL PERIPHERAL QUENCH CRYSTAL CENTRE PART

DERWENT-CLASS: L03 U11

CPI-CODES: L04-B01;

EPI-CODES: U11-B01;

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1999-139450 Non-CPI Secondary Accession Numbers: N1999-354450